8947

Original

Diag: Cht. No. 8102-3.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. LJ-10-3-67 Office No. H-8947

LOCALITY

State ALASKA

General locality CLARENCE STRAIT

Locality GRINDALL AND STREET ISLANDS

1967

CHIEF OF PARTY

Wayne L. Mobley

LIBRARY & ARCHIVES

DATE 7 AUG 1970

USCOMM-DC 5087

8947

FORM C&GS-537
(5-66)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

REGISTER NO.

H-8947

HYDROGRAPHIC TITLE SHEET

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

LJ-10-3-67

State S.E. Alaska

General locality Clarence Strait

Locality Grindall Island

Scale 1:10,000 Date of survey July 11 to Aug. 17, 1967

Instructions dated Feb. 1, 1967 Project No. OPR-465

Vessel USC&GSS LESTER JONES & Motor Launch 1192 (Lch 1)

Chief of party LCDR W.L. Mobley & Lt. M.H. Fleming

Surveyed by J.B. Courtney & M.H. Fleming

Soundings taken by echo sounder, hand lead, pole DE 723

Graphic record scaled by Ships Personnel

Graphic record checked by Ships Personnel

Protracted by Gerber Digital plotter Automated plot by Pacific Marine Center

Soundings penciled by NA

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW

REMARKS:

USCOMM-DC 37000-P66

DESCRIPTIVE REPORT

To Accompany

Hydrographic Survey H-8947/LJ-10-3-67

USC&GSS LESTER JONES
LCDR W. L. Mobley, Cmdg. to July 27, 1967
LT M. H. Fleming, Cmdg. from July 27, 1967

A. PROJECT -
This survey is a part of OPR-465 Instructions dated Feb. 1, 1967 and Change No. 1 dated 15 March 1967, Change No. 2 dated 31 March 1967, and Change No. 3 dated 16 June 1967.

B. AREA SURVEYED -
This survey is in Clarence Strait, S.E. Alaska. The area surveyed surrounds Grindall and Streets Islands, and includes Grindall Passage and the coast of Kasaan Peninsula south of Latitude 55° 30' 30"N and east of Longitude 132°10'30"W. Junctions were made with surveys H-8770 and H-8771. Hydrography was begun on July 11, 1967 and completed on August 17, 1967.

C. SOUNDING VESSEL -
USC&GS Launch 1192 was used for all soundings and its position numbers are shown in Blue on the boat sheet.

D. SOUNDING EQUIPMENT -
Raytheon Model 723 Fathometers were used. Serial No. 821 was used in July and No. 214 in August. Both require the same velocity and transducer corrector, which was compiled from bar check results and an oceanography station. All soundings are in fathoms and chart speed was on slow for entire ~~swing~~ survey. Times are 120°W.

E. SMOOTH SHEET -
Smooth sheet will be plotted by Electronic Data Processing methods by Pacific Marine Center.

F. CONTROL -
Visual Control was used for the entire survey. Existing triangulation or photo identification was used for the location of all signals. Advance manuscripts No. T-10698 and T-11504 and Incomplete manuscripts T-10694 were used in establishing control.

G. SHORELINE -
Shoreline was transferred from Advance Manuscripts No. T-10698 and T-11504 and Incomplete Manuscript T-10694. Shoreline has been verified and Field Edit of manuscripts covering the area surveyed completed.

H. CROSSLINES -

Ten percent of the sounding lines were crosslines and all gave satisfactory checks.

I. JUNCTIONS -

Satisfactory junctions were made with all contemporary surveys. A portion of a sounding line from a prior survey H-8771 would, however, seem to be in error. This line at Latitude 55°26.7'N, Longitude 132° 05.8'W is in an area of extremely steep sloping bottom where soundings are difficult to obtain. All new soundings in this area would tend to indicate that the sounding from survey H-8771 (Boat Sheet B) are in error by forty fathoms, or one scale of the fathogram.

J. COMPARISON WITH PRIOR SURVEYS -

Pre-Survey Review Items:

Item #1. Fish traps all gone, delete from chart.

Item #2. Remains of pilings are present but bare only at very low tides. Should remain charted.

All circled soundings on Pre-Survey Review that fall within this survey were investigated. They are in general agreement with this survey. The smooth tides and other correctors may bring the minimum depths to better agreement. Due to the extremely rugged bottom in the area surveyed a more shoal depth, if shown on the pre-survey review, could only satisfactorily be proven or disproven by wire drag methods.

The charted shoal at Latitude 55°26', Longitude 132°06' was satisfactorily developed in accordance with project instructions.

K. COMPARISON WITH CHART - 8142 5th Ed Jan 10/66

1. All fish traps shown on Chart ~~8412~~ are no longer present.

2. The largest discrepancy is in the extent and location of the shoals around Streets Island and between Streets Island and the Mainland. The best channel is nearer Streets Island and there is a 3 6/10 fathom shoal at Lat. 55°28.58', Long. 132°08.53', in what is charted to be the channel. There is an uncharted ledge off the southeastern tip of Streets Island. Its limit is Position No. 1089.

L. ADEQUACY OF SURVEY -

This survey is complete and adequate to supersede prior surveys.

M. AIDS TO NAVIGATION -

There are no aids to navigation within limits of this survey.

N. STATISTICS -

Number of Positions	1667 ~~1670~~
Nautical miles of sounding lines	164
Area surveyed - sq. nautical miles	4.8
Bottom Samples taken	61
Oceanographic Station	1

O. MISCELLANEOUS -

The area of survey is characterized by rocky and steeply sloping shores and strong offshore currents.

Grindall Island and Kasaan Peninsula are heavily forested to the storm high water line.

P. RECOMMENDATIONS -

None

Q. REFERENCE TO REPORTS -

Bottom Samples forwarded to:	Oceanography Division 8 November 1967
Photogrammetry Field Edit forwarded to:	Photogrammetry Division 16 February 1968
Tides Verified:	Tides & Currents Branch 2 February 1968

Respectfully submitted

John B. Courtney
ENSIGN, ESESSA

H-8947 - TIDE NOTE

Actual tides as recorded at a bubbler gage in Lyman Anchorage (Lat. 55°32'15"N, Long. 132°17'25"W), Clarence Strait, were used to reduce soundings for smooth sheet. Predicted tides for Lyman Anchorage were used to reduce soundings for Boat Sheet. Elevation of MLLW on 1967 staff, Lyman Anchorage, was received from headquarters office. All tidal observations were recorded in 120°W longitude time.

ECHO CORRECTIONS

Boat Sheet Soundings were not corrected for draft or velocity. They were reduced for predicted tides.

SMOOTH CORRECTORS

Initial: During the survey the fathogram initial was maintained at Zero. Any variations from this was compensated for in logging the survey sounding data for smooth plotting by Electronic Data Processing.

Initial Corrector	Logged as
-0.2	+0.1
-0.1	+0.2
0.0	+0.3
+0.1	+0.4
+0.2	+0.5

This was necessary since the computer will not accept negative values in this instance. This +0.3 fathoms is compensated for by velocity corrections.

Velocity: An oceanographic station was taken in the vicinity of the survey on July 21, 1967. This oceanographic data was used to compute the velocity correctors.

One table of Velocity Correctors is used for the entire survey. The bar check and transducer depth corrections are included in the velocity computations.

	Velocity Correctors As calculated		Velocity Correctors As Logged	
	Depth	Corrector	Depth	Corrector
To	2.5 fms.	+0.3	2.5 fms.	0
	10.0	+0.4	10.0	+1
	21.5	+0.5	21.5	+2
	31.0	+0.6	31.0	+3
	122.0	+0.7	122.0	+4
	195.0	+0.9	195.0	+6

These should be tenths - check seconds for this error
RHC

All velocity correctors are reduced by 0.3 fathoms to compensate for all initial correctors that were increased by 0.3 fathoms.

LYMAN TIDE GAGE

Tide Reducers - H-8947

This is printout of Tide Tape and upon verification by Washington The Tape need be corrected as per changes shown on This PrinTout.

Corrected Tapes Made and checked

J.B.C

Feb 8, 1968

TIDE REDUCERS
on Lyman Anchorage Gage.
SE ALASKA

H-8947

TIME 120 W	TIDE CORRECTOR	JULIAN DAY 1967	
080800	00 1005	0000 192 1 000000 000000	
081800	00 1004		
0829 08●900	00 1003		THE CORRECTION IS APPLIED IN THE TIME INTERVAL
084000	00 1002		FROM, BUT NOT INCLUDING , THE PREVIOUS TABULATED
085200	00 1001		TIME UP TO AND INCLUDING THE TIME OF THE
090900	00 0000		TABULATED CORRECTION.
092900	00 0001		CORRECTORS ARE IN TENTHS OF FATHOMS
095500	00 0002		FOR NEGATIVE CORRECTION, FIRST DIGIT IS 1
104000	00 0003		
110500	00 0002		
112700	00 0001		
114100	00 0000		
115300	00 1001		
120400	00 1002		
121400	00 1003		
122200	00 1004		
123100	00 1005		
124000	00 1006		
125000	00 1007		
130200	00 1008		
131100	00 1009		
132000	00 1010		
133000	00 1011		
133800	00 1012		
134700	00 1013		
135500	00 1014		
140400	00 1015		
141300	00 1016		
142300	00 1017		
143300	00 1018		
144500	00 1019		
145700	00 1020		
150700	00 1021		
152000	00 1022		
153500	00 1023		
160000	00 1024		
171400	00 1025		
173800	00 1024		
175300	00 1023		
080700	00 1010	0000 193 1 000000 000000	
081800	00 1009		
082700	00 1008		
083600	00 1007		
084300	00 1006		
085200	00 1005		
090300	00 1004		
091500	00 1003		
092800	00 1002		
094200	00 1001		
100000	00 0000		
102300	00 0001		

```
                114800
               ~~14800~~ 00 0001
               120300 00 0000
               121900 00 1001
               123100 00 1002
               124500 00 1003
               125800 00 1004
1310           ~~1361~~00 00 1005
               132000 00 1006
               132900 00 1007
               133800 00 1008
               134500 00 1009
               135400 00 1010
               140200 00 1011
               141100 00 1012
               142100 00 1013
               143000 00 1014
               144000 00 1015
               145100 00 1016
               150200 00 1017
               151300 00 1018
               152600 00 1019
               153800 00 1020
               155000 00 1021
               160200 00 1022
               161600 00 1023
               163500 00 1024
               175000 00 1025
               080600 00 1015 0000 194 1 000000 000000
               081500 00 1014
               082500 00 1013
               083500 00 1012
               084800 00 1011
               085800 00 1010
               091000 00 1009
               092000 00 1008
               093000 00 1007
               094000 00 1006
               095000 00 1005
               100200 00 1004
               101700 00 1003
               103600 00 1002
               110000 00 1001
               121000 00 1000
               123500 00 1001
               125500 00 1002
               131200 00 1003
               132500 00 1004
               133700 00 1005
               134800 00 1006
               135900 00 1007
               141000 00 1008
               142000 00 1009
               143100 00 1010
               144200 00 1011
               145100 00 1012
               150100 00 1013
               151100 00 1014
               152100 00 1015
               153200 00 1016
               154400 00 1017
               155500 00 1018
               160600 00 1019
```

161800 00 1020
163000 00 1021
164600 00 1022
170400 00 1023
173100 00 1024
180000 00 1025
081100 00 1010 0000 199 1 000000 000000
082300 00 1011
083400 00 1012
084500 00 1013
085600 00 1014
090800 00 1015
092000 00 1016
093400 00 1017
095000 00 1018
100800 00 1019
103000 00 1020
111000 00 1021
114200 00 1022
122600 00 1021
125000 00 1020
131000 00 1019
132700 00 1018
134300 00 1017
140000 00 1016
141700 00 1015
143200 00 1014
144800 00 1013
150400 00 1012
152100 00 1011
154200 00 1010
161200 00 1009
172000 00 1008
081000 00 1004 0000 200 1 000000 000000
082000 00 1005
083000 00 1006
084000 00 1007
085000 00 1008
090000 00 1009
091100 00 1010
092200 00 1011
093200 00 1012
094200 00 1013
095300 00 1014
100500 00 1015
101800 00 1016
103000 00 1017
104200 00 1018
105800 00 1019
111200 ~~111100~~ 00 1020
113400 00 1021
120500 00 1022
125500 00 1023
132800 00 1022
135000 00 1021
140800 00 1020

```
142200 00 1019
143600 00 1018
144900 00 1017
150200 00 1016
151700 00 1015
152900 00 1014
154200 00 1013
155500 00 1012
161000 00 1011
162500 00 1010
164300 00 1009
170200 00 1008
081200 00 0001 0000 201 1 000000 000000
082800 00 0000
084000 00 1001
085000 00 1002
085900 00 1003
091000 00 1004
092000 00 1005
092900 00 1006
093800 00 1007
094700 00 1008
095800 00 1009
100600 00 1010
101700 00 1011
102500 00 1012
103600 00 1013
104600 00 1014
105600 00 1015
110700 00 1016
111800 00 1017
112900 00 1018
114100 00 1019
115500 00 1020
121300 00 1021
123700 00 1022
141100 00 1023
143300 00 1022
145000 00 1021
150500 00 1020
152000 00 1019
153100 00 1010
154100 00 1017
155200 00 1016
160200 00 1015
161100 00 1014
162100 00 1013
163100 00 1012
164500 00 1011
170500 00 1010
081400 00 1004 0000 206 1 000000 000000
082700 00 1003
084100 00 1002
085800 00 1001
092000 00 0000
104700 00 0001
111000 00 0000
112800 00 1001
114100 00 1002
115400 00 1003
```

```
120400 00 1004
121300 00 1005
122200 00 1006
123300 00 1007
124300 00 1008
125400 00 1009
130400 00 1010
131200 00 1011
132200 00 1012
133100 00 1013
134100 00 1014
135000 00 1015
140100 00 1016
141100 00 1017
142300 00 1018
143500 00 1019
144900 00 1020
150200 00 1021
151800 00 1022
154000 00 1023
171000 00 1024
080900 00 1009 0000 207 1 000000 000000
081900 00 1008
083000 00 1007
084100 00 1006
085200 00 1005
090600 00 1004
092100 00 1003
094000 00 1002
101500 00 1001
105500 00 0000
113100 00 1001
115100 00 1002
120800 00 1003
122100 00 1004
123300 00 1005
124500 00 1006
125500 00 1007
130500 00 1008
131600 00 1009
132600 00 1010
133700 00 1011
134900 00 1012
140000 00 1013
141100 00 1014
142200 00 1015
143300 00 1016
144400 00 1017
145500 00 1018
150800 00 1019
152000 00 1020
153500 00 1021
155500 00 1022
163100 00 1023
170000 00 1024
080300 00 1005 0000 215 1 000000 000000
081800 00 1006
083000 00 1007
084100 00 1008
```

08 5200 00 1009
090300 00 1010
091700 00 1011
092800 00 1012
094000 00 1013
095600 00 1014
101100 00 1015
102900 00 1016
104800 00 1017
111000 00 1018
114300 00 1019
130900 00 1020
134200 00 1019
140500 00 1018
142500 00 1017
144100 00 1016
150000 00 1015
151800 00 1014
153600 00 1013
155600 00 1012
162000 00 1011
164700 00 1010
170000 00 1009
080300 00 1014 0000 227 1 000000 000000
081900 00 1015
083700 00 1016
090000 00 1017
093000 00 1018
111000 00 1019
114200 00 1018
120900 00 1017
123000 00 1016
125000 00 1015
131000 00 1014
133100 00 1013
135500 00 1012
142200 00 1011
150000 00 1010
160900 00 1009
165000 00 1010
170000 00 1011
080600 00 1010 0000 228 1 000000 000000
082000 00 1011
083100 00 1012
084300 00 1013
~~085700 00 1014~~
085700 00 1014
091000 00 1015
092400 00 1016
094100 00 1017
100000 00 1018
102800 00 1019
111500 00 1020
114800 00 1021
123300 00 1020
130000 00 1019

132000 00 1018
133900 00 1017
135500 00 1016
141100 00 1015
142800 00 1014
144300 00 1013
150000 00 1012
152100 00 1011
154800 00 1010
162500 00 1009
170000 00 1008

Plane of Reference Approved
Datum Planes Section
Date 2-2-68

FORM C&GS-733M
(8-23-60)

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

VESSEL	PROJ. NO.	YEAR		CHECKED BY	DATE CHECKED
Lester Jones	OPR 465	67	LJ-10-3-67 Grindall, Clarence Strait Alaska		

SERIAL NO.	DATE	SAMPLE POSITION LATITUDE	SAMPLE POSITION LONGITUDE	DEPTH (Fathoms)	WEIGHT OF SAMPLER	APPROX. PENETRATION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, dented cutter, stat. no., type of bottom relief i.e., slope, plain, disposition, etc.)	OBS. INIT.
2500	Aug 15 '67	55°27'13" ~~55°32'16"~~	132°05'24" ~~132°17'36"~~		15 lb			Gn	Fnd+Brk Sh, P S		
2501		55°27'13" ~~55°32'16"~~	132°07'37" ~~132°17'36"~~						ST		
2502		55°26'56" ~~55°32'15~~	132°07'38" ~~132°17'37"~~						S, Fnd Brk Sh		
2503		55°26'54" ~~55°32'09"~~	132°07'39" ~~132°17'43"~~						Brk Sh, seaweed		
2504		55°26'55" ~~55°32'19"~~	132°07'13" ~~132°17'36"~~		1 qt				Brk Sh, P		
2505		55°27'05" ~~55°32'13"~~	132°06'57" ~~132°17'36"~~		sm				P		
2506		55°26'09"	132°06'21"		sd				P, S		
2507		55°26'28"	132°06'15"						Brk Sh		
2508		55°26'37"	132°06'23"		1 qt			Gn	Wood, fnd Brk Sh, G		
2509		55°26'53"	132°06'34"		sm					3 casts No Sample	
2510		55°26'13"	132°06'38"						G, Brk Sh		
2511		55°26'03"	132°07'03"		s				P, Brk Sh		
2512		55°26'04"	132°07'20"		1 qt			Gn	Fnd Brk Sh		
2513		55°26'13"	132°07'45"		c			Gn	M, Sh Fnd Brk Sh		
2514		55°26'18"	132°07'55"					Gn	Sh, M, Fnd Brk Sh		
2515		55°26'[illegible]"	132°08'[illegible]"					Gn	P, Fnd Brk Sh, M		
		15	23								

05
15

Use more than one line per sample if necessary.

USCOMM-DC 8220-P62

FORM C&GS-733M
(8-23-60)

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

VESSEL: Lester Jones | PROJ. NO.: OPR 465 | YEAR: 67 | Grindall LJ-10-3-67 clarence ST. Alaska | CHECKED BY: | DATE CHECKED:

SERIAL NO.	DATE	SAMPLE POSITION LATITUDE	SAMPLE POSITION LONGITUDE	DEPTH (Fathoms)	WEIGHT OF SAMPLER	APPROX. PENETRATION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, dented cutter, stat. no., type of bottom relief i.e., slope, plain, disposition, etc.)	OBS. INIT.
2516	Aug 15 '67	55°26'05"	132°08'18"		15lb					4 casts No Sample	
2517	"	55°26'25"	132°08'30"					dk Gn	M, wood		
2518	"	55°26'27"	132°08'49"						P, Brk Sh		
2519	"	55°26'22"	132°09'20"						P, Brk Sh		
2520	"	55°26'30"	132°09'41"						Brk Sh, Sbg,		
2521	"	55 26 42 ~~55°27'21"~~	132°10'07" ~~132°09'15"~~		lev				St		
2522	Aug 17 '67	55 27 00 ~~55°27'09"~~	132°10'31" ~~132°09'06"~~		sand			Gn	Brk Sh, S		
2523		55 26 52 ~~55°26'11"~~	132°10'11" ~~132°09'06"~~		sa			Gn	S, Fne & Brk Sh G		
2524		55°27'02"	132°09'18"					Gn	Brk Sh, Seaweed, Co		
2525	"	55°26'47"	132°09'38"		shell				brk Sh, Seaweed		
2526		55°26'56"	132 08' 55"		S				brk Sh,		
2527		55°26'58"	132°08'49"		sand				sbg, brk Sh		
2528		55°27'17"	132°09'13"		U				brk Sh		
2529		55°27'29"	132°09'08"					Gn	Fne & brk Sh, S		
2530		55 27 27 ~~55°27'29"~~	132 08 52 ~~132°08'52"~~					Gn	S Fne & Brk Sh		

81
22
23
30

Use more than one line per sample if necessary.

USCOMM-DC 8220-P62

FORM C&GS-733M
(8-23-60)

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

VESSEL	PROJ. NO.	YEAR		CHECKED BY	DATE CHECKED
Lester Jones	OPR 465	67	LJ-10-3-67 Grindall Clarence Strait Alaska		

SERIAL NO.	DATE	SAMPLE POSITION LATITUDE	SAMPLE POSITION LONGITUDE	DEPTH (Fathoms)	WEIGHT OF SAMPLER	APPROX. PENETRATION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, dented cutter, stat. no., type of bottom relief i.e., slope, plain, disposition, etc.)	OBS. INIT.
					15lb						
2531	Aug 17 '67	55°27'23"	132°08'50"		sleeve			gh gy	S S Sh		
2532		55°27'05"	132°08'36"		shell sample				P		
2533		55°27'07"	132°06'37"						P		
2534		55°27'19"	132°07'00"							No Sample	
2535		55°27'44"	132°07'19"							No Sample	
2536		55°27'27"	132°07'38"					Gh	M		
~~2537~~		~~55°28'01"~~	~~132°07'49"~~								
~~2538~~											
~~2539~~											
~~2540~~											
~~2541~~											
~~2542~~											
~~2543~~											
~~2544~~											
~~2545~~											

Use more than one line per sample if necessary.

USCOMM-DC 8220-P62

FORM C&GS-733M
(8-23-60)

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

VESSEL	PROJ. NO.	YEAR		CHECKED BY	DATE CHECKED
Hestar Jones	OPR 465	67	LJ - 10-3-67 Grindall Clarence Strait Alaska		

SERIAL NO.	DATE	SAMPLE POSITION		DEPTH (Fathoms)	WEIGHT OF SAMPLER	APPROX. PENETRATION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, dented cutter, stat. no., type of bottom relief i.e., slope, plain, disposition, etc.)	OBS INIT
		LATITUDE	LONGITUDE								
2537	Aug 22	55°28'01"	132°07'49"	48	15 lb				P, St,		
2538	"	55°27'45"	132°07'52"	75				GN	S, P		
2539	"	55°27'33"	132°08'06"	36				GN	G, P		
2540	"	55°28'20"	132°08'00"	34				Gn	P, St, S		
2541	"	55°28'32"	132°08'17"	16					P		
2542	"	55°28'34"	132°07'56"	6	wh lar				Seaweed		
2543	"	55°28'56"	132°08'12"	20	wh				Brk Sh., Seaweeds		
2544	"	55°29'50"	132°08'42"	30	sa				P		
2545	"	55°29'04"	132°09'12"	37					G, P		
2546	"	55°29'18"	132°09'30"	45	el				S, P		
2547	"	55°29'32"	132°09'35"	49	sh				P, S		
2548	"	55°29'43"	132°09'54"	44	[illegible]					3 casts No sample	
2549	"	55°29'56"	132°09'58"	51	0				G		
2550	"	55°30'01"	132°10'19"	46					St, S, Brk Sh		
2551	"	55°30'10"	132°10'33"	35					brk sh, wood		
2552	"	55°30'19"	132°10'18"	60				Gn	P		
2553	"	55°30'33"	132°10'41"	52					Sbg		

Use more than one line per sample if necessary.

USCOMM-DC 8220-P62

FORM C&GS-733M
(8-23-60)

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

VESSEL	PROJ. NO.	YEAR		CHECKED BY	DATE CHECKED
Lester Jones	OPR. 465	67	LJ - 10-3-67 Grindall Clarence St. Alaska		

SERIAL NO.	DATE	SAMPLE POSITION LATITUDE	SAMPLE POSITION LONGITUDE	DEPTH (Fathoms)	WEIGHT OF SAMPLER	APPROX. PENETRATION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, dented cutter, stat. no., type of bottom relief i.e., slope, plain, disposition, etc.)	OBS. INIT.
2554 A	Aug 17	55°27'15"	132°09'14"	13	15 lb			LT GN	S, FNE & BRK Sh.		
2555 B	"	55°26'46"	132°08'52"	10				LT GN	S, fNe & Brk sh, P, C,		
2556 C	"	55°26'57"	132°08'32"	11	15 lb			GN	M, fNe & BRK sh,		
2557 D	"	55°27'39"	132°08'27"	11	15 lb				G.P,	3 CASTS HARD Bottom	
2558 E	"	55°28'07"	132°08'24"	7	15 lb				P.	3 CASTS HARD Bottom	
2559 F	"	55°28'32"	132°08'40	11				LT GN	Kelp, G, fNe & BRK Sh.		
2560 G	"	55°28'41"	132°09'05"	10	15 lb				BRK. Sh.	3 CASTS HARD BOTTOM	
2561 H	"	55°28'54"	132°09'31"	10	15 lb			GN	fNe & BRK sh.	3 CASTS	

Use more than one line per sample if necessary.

USCOMM-DC 8220-P62

Geographic Names Penciled on H-8947

GRINDALL ISLAND
STREETS ISLAND
GRINDALL POINT
GRINDALL PASSAGE
KASAAN PENINSULA
CLARENCE STRAIT

SIGNALS H-8947

H-NO.	Sig. NO.	LATITUDE	LONGITUDE	SOURCE
8947	301	55270313"	132075714"	T-10698
8947	342	55304185	132112688	"
8947	302	55265891	132082293	"
8947	303	55265435	132082669	"
8947	304	55265393	132085816	"
8947	305	55270206	132093588	"
8947	306	55270856	132091395	"
8947	307	55272247	132091264	"
8947	308	55273288	132090301	"
8947	309	55272063	132083296	"
8947	310	55263595	132091275	"
8947	311	55263210	132084200	"
8947	312	55263304	132083187	"
8947	313	55262903	132082305	"
8947	314	55262386	132081531	"
8947	315	55262460	132075723	"
8947	316	55261729	132074494	"
8947	317	55261406	132072417	"
8947	318	55261322	132071541	"
8947	319	55261723	132070841	"
8947	320	55262376	132070108	"
8947	321	55262198	132064691	"
8947	322	55262570	132062803	Δ Grindall 1912-15 RM#1
8947	323	55263362	132063082	T-10698
8947	324	55263928	132063576	"
8947	325	55265057	132064650	Δ Approach 1915
8947	326	55264905	132071752	T-10698
8947	327	55264902	132073487	"
8947	328	55265228	132075114	"
8947	329	55270517	132103214	Δ Ren 1924
8947	330	55272282	132082380	T-10698
8947	331	55275128	132082636	"
8947	332	55281522	132083150	"
8947	333	55282813	132084990	"
8947	334	55283873	132080917	Δ Streets 1915-24
8947	335	55283621	132092883	T-10698
8947	336	55285859	132093918	"
8947	337	55292716	132094800	"
8947	338	55294093	132101652	T-11504
8947	339	55295351	132102640	"
8947	340	55301813	132104507	Δ Bo 1922
8947	341	55303214	132111027	T-10694
8947	342	55304185	132112688	"

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8947

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Clarence Strait										1
Approach Point										2
Grindall Island										3
Grindall Passage										4
Grindall Point										5
Kasaan Bay										6
Kasaan Peninsula										7
Streets Island										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

PREPARED BY

Frank W. Nicholson

CARTOGRAPHIC TECHNICIAN

APPROVED BY

A. Joseph Wraight

CHIEF GEOGRAPHER

FORM C&GS-946
(REV. 11-65)
(PRESC. BY
HYDROGRAPHIC
MANUAL 20-2,
6-94, 7-13)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY
NAUTICAL CHART DIVISION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-8947

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & P.O.	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	4

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES			1			
CAHIERS	1					
VOLUMES	6					
BOXES						

T-SHEET PRINTS *(List)*

SPECIAL REPORTS *(List)*

OFFICE PROCESSING ACTIVITIES

The following statistics will be submitted with the cartographer's report on the survey

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				1667
POSITIONS CHECKED				
POSITIONS REVISED				
DEPTH SOUNDINGS REVISED				
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS				
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS				
SPECIAL ADJUSTMENTS		101		
ALL OTHER WORK		99		
TOTALS		200		

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY LT(JG) Hogue, Ens Courtney, Richard Lynn	BEGINNING DATE 12/21/67	ENDING DATE 22 July 1970
REVIEW BY	BEGINNING DATE	ENDING DATE

USCOMM-DC 36271-P65

Verifiers Report

OPR-465

LJ-10-3-67 H-8947

The Position Number Overlay was verified by a Ships Officer while temporarily assigned to P.M.C. The Preliminary Sounding Overlay was verified by another Ships Officer under the same circumstances and no time was kept. This resulted in the verifier responsible for the Smooth Sheet. This system is not recommended for future verification of surveys. Forms C&GS-946 and 946A reflect only the time spent by this verifier making a cursory examination of this sheet plus the finishing touches, reports and records.

REN, 1924 a △ station on this sheet is shown on H-8771 as a Topographic station. H-8771 is believed to be in error, (LITH. pg. 89 Vol I).

In many inshore areas delineation of the bottom configuration was not attempted due to lack of data.

Richard Lynn

Richard Lynn

Comparisons were made with USC&GS Chart 8142 5th Edition Jan. 10, 1966.

APPROVAL SHEET

The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's report.)

Examined and approved

William M. Martin

William M. Martin
Supervisory Carto. Tech.

Approved and forwarded

K. William Jeffers

K. William Jeffers, CDR, USESSA
Chief, Processing Division, PMC

FORM C&GS-946A
(REV. 11-65)
PRES. BY HYDROGRAPHIC MANUAL, 6-94)

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

VERIFIER'S REPORT

HYDROGRAPHIC SURVEY, H-8947

INSTRUCTIONS - This form serves to identify items of a check list in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

CL - Check List Items: should be checked as having been completed during the verification processes.

R - Report Item: This column refers to those items reported to the reviewer and is used to indicate the items discussed.

Part I - DESCRIPTIVE REPORT	CL	R
Note: The verifier should first read the Descriptive Report for general information and problems.		
1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None	✓	
2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: -- None	✓	
3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None	✓	
Part II - SHORELINE AND SIGNALS		
4. Source of shoreline signals Remarks Required: -- List all surveys a. Give earliest and latest dates of photographs b. Field inspection date c. Field Edit date d. Reviewed-Unreviewed	✓	
5. The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.	✓	
6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 424 on the smooth sheet. Remarks Required: -- None	✓	
7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still unidentified.		
Part III - JUNCTIONS		
Note: Make a cursory comparison preliminary to inking soundings in area of overlap.		
8. All junctions of contemporary or overlapping sheets were transferred in colored ink and overlapping curves were made identical. Remarks Required: -- None	✓	
9. The notation in slanted lettering "JOINS H----(19)" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None	✓	

Part III - JUNCTIONS (Continued)	CL	R
10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: -- Consider conditions after adjustments have been made; note adjustments made. Make special notes of **Butt** junctions and areas which are **SUPERSEDED.**	✓	
Part IV - VOLUMES		
11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes. Remarks Required: -- None	✓	
12. Condition of sounding records was satisfactory except as follows: Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following: (a) rocks (b) line turns (c) position values of beginning and ending of lines (d) bar check or velocity correctors (e) time recording (f) notes or markings on fathograms (g) was reduction of soundings accurately done ? (h) was scanning accurate? (i) were peaks at uneven intervals missed? (j) were stamps completed? (k) references to adjacent features	✓	
Part V - PROTRACTING		
13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None		
14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None		
15. All detached positions locating **critical** soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None	✓	

Part V - PROTRACTING (Continued)	CL	R
16. The protracting was satisfactory except as follows: Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.		
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.		
Part VI - SOUNDINGS		
18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None		
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.	/	
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None	/	
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None	/	
22. The smooth plotting of soundings was satisfactory except as follows: Remarks Required: -- Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.	/	
Part VII - CURVES		
23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected.	AEE	
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: a. From T-Sheet in dotted black lines b. From soundings in orange c. Approximate position of sketched curve is dashed orange d. Approximate position of shoal area not sounded in black dashed Remarks Required: -- None	✓	
25. Depth curves were satisfactory except as follows: (This statement should not refer to the manner in which the curves were drawn). Remarks Required: -- Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.	✓	

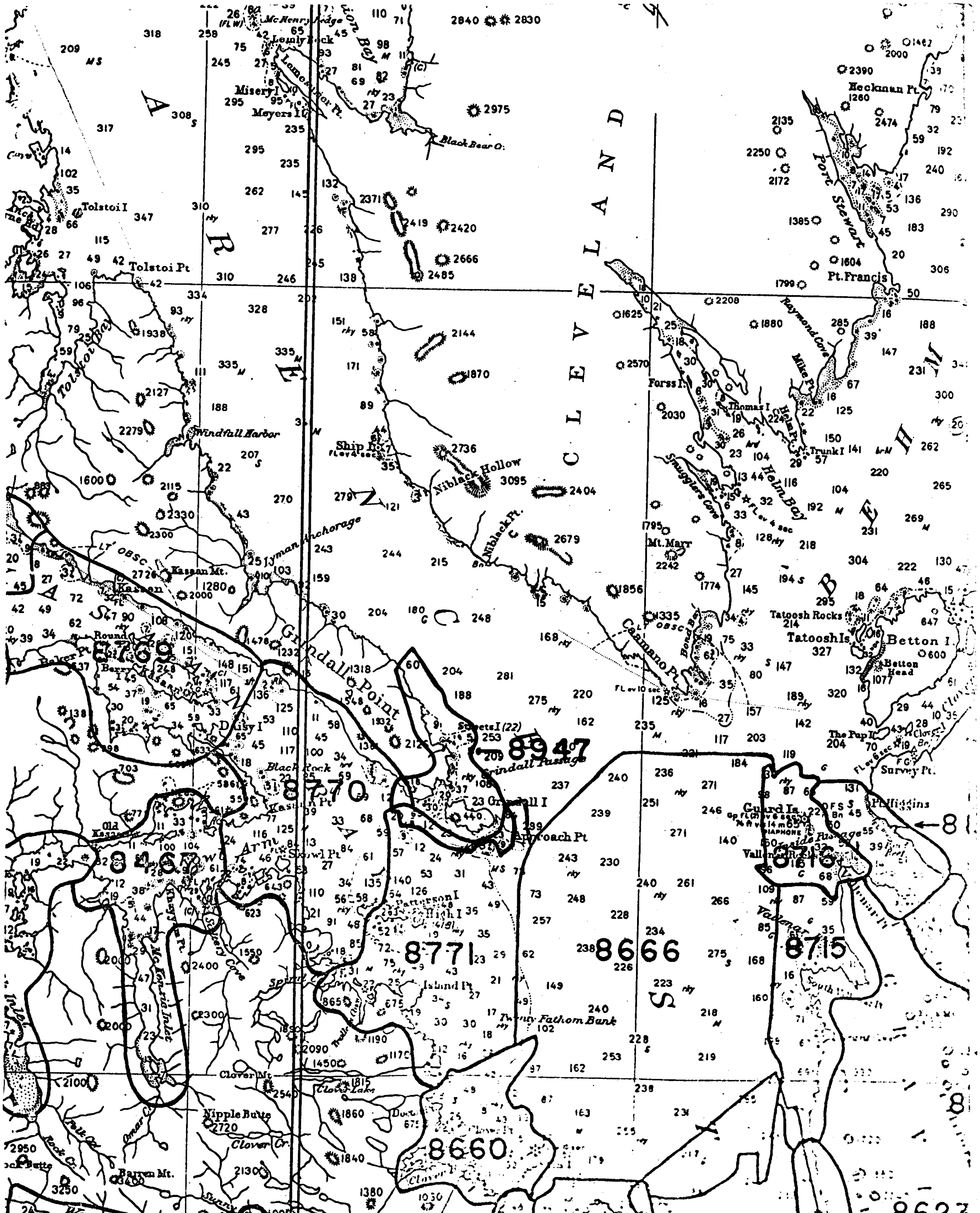
Part VIII - AIDS TO NAVIGATION	CL	R
26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey. Remarks Required: -- Conflicts of any nature listed.	✓	
27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification. Remarks Required: -- None	✓	
Part IX - BOATSHEET		
28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None	✓	
29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.	✓	
Part X - GENERAL		
30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2). Remarks Required: -- None	✓	
31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None	✓	
32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None	✓	
33. The bottom characteristics are adequately shown. Remarks Required: -- None	✓	
Part XI - NOTES TO THE REVIEWER		
34. Unresolved discrepancies and questionable soundings.		
35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.		
36. Supplemental information.	✓	

Verified by

LT(JG) Hogue, ENS. Courtney, Richard Lynn

Date

22 July 1970


Tolstoi I
Tolstoi Pt
Tolstoi Bay
Windfall Harbor
Lyman Anchorage
Kasaan Mt.
Kasaan
Grindall Point
Grindall Passage
Grindall I
Approach Pt
Black Rock
Kasaan Pt
Patterson I
High I
Island Pt
Twenty Fathom Bank
Clover Mt.
Clover Lake
Nipple Butte
Clover Cr.
Barren Mt.
West Arm
Chomly
Niblack Hollow
Niblack Pt.
Ship I
Meyers I
Misery I
Lemly Rock
McHenry Ledge
Black Bear C.
CLEVELAND
Forss I
Thomas I
Helm Pt.
Helm Bay
Smugglers Cove
Mt. Marr
Caamano Pt.
Port Stewart
Pt. Francis
Raymond Cove
Mike Pt.
Trunk I
Tatoosh Rocks
Tatoosh Is.
Betton I
Betton Head
The Pup I.
Survey Pt.
Guard Is.
Vallenar Pt.
Hecknan Pt.
8947
8770
8769
8771
8666
8715
8660
8623

(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8947

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
8142	1/15/71	J.S. McMillan	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via
			Drawing No. 10-critical Corrections only
8102	4-20-71	E. Frey	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via
			Drawing No. 21 Critical corrections only via cht 8142 ≠10
8083	1-8-72	J. Graham	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via
			Drawing No. 3 Appl'd prior critical corrections only.
8142	9/27/72	James Graham	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via
			Drawing No. Reapplied verified sheet for critical corr's only
8083	9/28/72	James Graham	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via
			Drawing No. Reapplied thru cht. 8142
Consider this application as final.		1/27/76 DIK	overlap area to bring chts. into agreement
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63